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ABSTRACT

This research study was based upon a national survey in March 1992, conducted to assess the economic literacy of the U.S. public. The survey data were used to measure the economic knowledge of the public, to identify factors that affect economic knowledge, and to evaluate the influence of economic knowledge on public opinion about current economic issues. The survey data were collected by The Gallup Organization via telephone interviews from a national random sample of 1,005 adults aged 18 years or older. The survey instrument, developed by a national committee of 10 economists drawn from education, business, and labor, contained 46 questions that tested economic knowledge, sought opinions on economics issues, and gathered information on background characteristics, such as education and income of respondents. The public showed significant deficiencies in their knowledge and awareness of basic economics in such areas as unemployment, inflation, and economic growth. All survey respondents had strong opinions about economic issues despite having limited economic knowledge. Economic illiteracy has the potential to misshape public opinion on economic issues and lead to policies that have negative or perverse effects on the economy and on economic institutions. Contains 8 tables. (EH)

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Economic Knowledge, Economic Education and Public Opinion on Economic Issues

William B. Walstad*

(March, 1994)

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ECONOMIC KNOWLEDGE, ECONOMIC EDUCATION AND PUBLIC OPINION ON ECONOMIC ISSUES

Economic events and issues were a major concern of the American public in 1991 and 1992. This concern arose because the national economy experienced a recession from mid-1990 through the first quarter of 1991, and a weak recovery thereafter. Joblessness rose as the unemployment rate climbed from 5.5 percent in mid-1990 to 7.6 percent in mid-1992. Frequent news reports about corporate restructuring and layoffs reminded the public of the poor condition of the job market. The Congress and the President engaged in lively debates over the direction of fiscal policy and whether the economy needed to be stimulated by capital gains tax cuts or increased government spending. The weak economy became the central issue of the 1992 Presidential election. Fears also grew about the size of the Federal budget deficit because it was expected to increase from $270 billion in 1991 to about $400 billion in 1992. And, the Federal Reserve made front-page news each time it cut the discount rate (five times in 1991 and once in 1992).

Despite the attention that is often given to economics in national discourse, little is known about the extent of public understanding of such national issues as unemployment, economic growth, budget deficits, tax policy, government spending, monetary policy, inflation, corporate profits, trade deficits, or the value of the dollar. This study, therefore, conducted a national survey to assess the economic literacy of the American public. The survey was administered in March 1992, a month that occurred at about the midpoint of a two-year period of intense public interest in the national economy and economic events. The survey data were used to measure the

economic knowledge of the public, to identify factors that affect economic knowledge, and to evaluate the influence of economic knowledge on public opinion about current economic issues.

The survey data were collected by The Gallup Organization via telephone interviews from a national random sample of 1,005 adults aged 18 years or older. The survey instrument was developed by a national committee of 10 economists drawn from education, business, and labor. The survey contained 46 questions that tested economic knowledge, sought opinions on economic issues, and gathered information on background characteristics such as the education and income of respondents. The maximum margin of sampling error for the question responses was plus or minus (+/-) 3 percentage points at the 95 percent level of confidence.[1]

The survey results are reported in five sections of this paper. The first two sections present the percentage responses to the major knowledge questions and opinion questions. The third section gives the results from a crosstabulation of the responses to selected opinion questions with economic knowledge questions. The fourth section reports results from estimating a regression equation that identifies factors contributing to economic knowledge, including the effects of economic education on economic knowledge. The final section discusses the findings from logit analyses of opinions on selected economic issues that are used to evaluate the influence of economic knowledge and other factors on the probability of holding an opinion on an economic issue.

I. Economic Knowledge

The American public showed significant deficiencies in their knowledge and awareness of basic economics. Overall, the general public correctly answered only 39 percent of economic knowledge questions. The following discussion lists the major economic topics included in the survey and describes the percentage of correct responses for each topic. A summary of the percentage of correct response to knowledge questions is found in Table 1.

Insert Table 1 about here

Unemployment. Only 22 percent of the general public knew the national rate of unemployment despite the fact that it was a major issue in 1991 and 1992. Thirty-nine percent thought the rate was much higher than it was, and 30 percent did not know the unemployment rate.

Inflation. Only 11 percent of the general public knew the national rate of inflation. Thirty-four percent thought it was greater than it was and almost half (46 percent) simply did not know. Furthermore, only 35 percent could identify the Consumer Price Index (CPI) as the most widely used measure of inflation. Forty-six percent believed inflation was measured by the prime rate, index of leading economic indicators, or the Federal funds rate.

Economic growth. Just 40 percent of the public knew what was meant by economic growth. Sixty percent thought economic growth was assessed by a change

in the producer price index, the money supply, the balance of payments or something else, rather than by a change in the gross domestic product.

The Federal budget deficit. Only half the public (51 percent) recognized a correct definition of the Federal budget deficit. Forty-two percent confused the Federal budget deficit with the money supply or with the trade deficit. The remainder did not know. Most people also had no idea of the size of the budget deficit. Only about one-in-five (19 percent) were aware of the expected size of the deficit when the survey was administered. Sixty-three percent of the public incorrectly expected the 1992 deficit to be $700 billion and $1 trillion.

The Federal Reserve. Just one-third knew that monetary policy was set by the Federal Reserve, not by the Congress, the President, or the U.S. Treasury. In further probing with another question, only 21 percent could identify as a correct example of monetary policy (a change in the discount rate) despite the fact that changes in the discount rate made front-page news three times in late 1991, shortly before the survey was conducted. Seventy-nine percent incorrectly thought monetary policy was a change in corporate profits, Federal government spending, or did not know.

Fiscal policy. Only half of the American public knew that the President and Congress were responsible for fiscal policy. Moreover, in another question, only 23 percent could identify a change in Federal income tax rates as a correct example of fiscal policy from a list that also included a change in the prime rate or a change in the discount rate.

Profits. Just 36 percent knew the basic purpose of profits in our economy. Half of the American public thought the purpose of profits was to transfer income to the wealthy or just to pay for the wages and salaries of workers. In addition, just 13 percent knew the percentage rate of profit as a return on investment earned by major American corporations. It has averaged about 13 percent for the past decade (range: 10 to 16 percent). The average response of the American public was a 32 percent profit rate -- about two and a half times what it actually was.

The value of the dollar. Only half the American public knew that an increase in the value of the dollar is most likely to lead to a decrease in U.S. exports. The other half thought it would increase exports, have no influence, or did not know.

Trade barriers. From an economic perspective, trade barriers are not effective in increasing domestic employment in the long-run because they diminish world trade. Only 49 percent of the American public recognized this fallacy of protectionism. Forty-nine percent incorrectly thought that import quotas would increase the number of American jobs in the long-run.

Higher Knowledge Areas. On three questions, the general public showed a somewhat higher level of economic knowledge. These questions were on topics that had the most direct effect on people's lives: wages, purchasing power, and prices. About two-thirds (68 percent) of the public recognized that an increase in productivity was the factor most likely to increase the wages of American workers. Three-fifths (60 percent) understood that the inflation rate has the most effect on the purchasing power of people's incomes. Sixty-four percent understood that the prices of most

products in competitive markets are determined by supply and demand and not by government, business monopolies, or the Consumer Price Index.

Self-Evaluations. People surveyed were also asked for a self-evaluation of their economic knowledge. The general public was aware of personal deficiencies in economic knowledge. About half of the respondents rated their understanding of economics and economic issues as only fair and about one-third rated it as poor, on a scale that ranged from excellent to good to fair to poor. The self-evaluations showed that over 80 percent of the general public recognized their lack of economic understanding, and served to confirm the results from the knowledge scores that showed that most Americans possess only limited knowledge about economics and the national economy.

II. Opinions on Economic Issues

All survey respondents had strong opinions about economic issues despite having limited economic knowledge. The discontinuity between economic knowledge and opinion can be illustrated with the following examples.

Unemployment. The dominant economic issue identified by the American public was the job market (unemployment) with 46 percent citing its importance. The respondents recommended a number of actions that should be taken by the Federal government to reduce unemployment, such as a jobs training program or more public works projects. Nevertheless, only 22 percent of the American public knew the rate of unemployment, and most either overstated it (39 percent) or did not know the rate (30 percent).

Federal deficit. The general public suggested actions to be taken by the Federal government to reduce the Federal deficit, such as increasing taxes on business (40 percent) or passing legislation to require a balanced budget amendment (78 percent). The American public may not fully understand the economic consequences of these actions because only 51 percent could define a budget deficit and only 19 percent knew the expected size of the budget deficit at the time of the survey.

Supply and demand. Although most people (64 percent) recognized that prices are determined by supply and demand in a competitive market, the depth of that understanding was suspect when opinions were asked. Given a situation where the supply of oil is reduced by a crisis in the Middle East, almost two-thirds (65 percent) wanted government to stop the price rise rather than let supply and demand determine prices in the oil market.

Federal Reserve. Only a third of the general public knew that the Federal Reserve was responsible for monetary policy and even fewer could recognize an example of monetary policy. Nevertheless, two-thirds thought that some other organization such as Congress (38 percent) or the U.S. Treasury (13 percent) should be responsible for conducting monetary policy.

III. Relationships Between Knowledge and Opinion

This last example on the Federal Reserve can be used to demonstrate the effect of economic knowledge on public opinion. The knowledge question asked:

What is an example of monetary policy? Would it be a change in: (a) the discount rate; (b) a change in Federal government spending; or (c) a change in corporate profits.

Only 21 percent of the general public correctly knew that a change in the discount rate was an example of a change in monetary policy. Despite this lack of knowledge, all those interviewed answered the following opinion question:

Who should set monetary policy? Should it be the:
(a) President; (b) Congress; (c) Federal Reserve; or
(d) United States Treasury.

When responses from the monetary policy knowledge and opinion questions were crosstabulated, they showed that there were significant differences in the support for the Federal Reserve based on the respondent's correct or incorrect responses to the knowledge question about the Federal Reserve. These results are shown in Table 2. Overall, only 21 percent of adults thought that the Federal Reserve should control monetary policy, but among adults who could give a correct example of a change in monetary policy, 41 percent thought that monetary policy should be set by the Federal Reserve. For adults who gave incorrect answers, the percent supporting control of monetary policy by the Federal Reserve dropped to 16 percent.

Insert Table 2 about here

Shown in the lower half of Table 2 are the crosstabulations of the monetary policy opinion question with the overall economic knowledge scores, based on the 19 economic knowledge questions in the survey. The knowledge scores were divided at the mean (greater than 8 questions correct versus less than or equal to 8 questions correct). Thirty-eight percent of adults with scores above the mean, but only 13 percent who scored at or below the mean, thought that the Federal Reserve should set monetary policy. The differences in opinions between high and low knowledge scores mirrored the differences in opinions based on the correctness of response to a single knowledge question related to the issue. Both analyses demonstrate that there are significant effects of economic knowledge on economic opinion, whether the knowledge is measured by the response to a specific question or by a general economic knowledge score.

Similar crosstabulations of opinion and knowledge questions on the Federal budget deficit, economic growth, government controls on gasoline prices, or trade protectionism were performed to investigate whether there were any substantive differences in results based on whether knowledge was measured by a response to one knowledge question or by an overall knowledge score. No substantive differences were found in the pattern of breakdowns based on the knowledge measure used. For the sake of parsimony, only the overall knowledge scores are used for the subsequent analysis. For the same reason, the opinion response categories were reduced. Only the percentages not supporting a proposition are reported in Table 3.

Insert Table 3 about here

On the issue of the Federal budget deficit, 55 percent of the public was opposed to increasing taxes on business to reduce the deficit and 45 percent were either in favor of increasing taxes or had no opinion on the issue. For people with economic knowledge scores greater than the mean, however, the opposition to taxes was much stronger (69 percent) compared to people with scores below the mean (48 percent).

Large differences in percentage responses (18-28 points) were found between high and low knowledge respondents on other issues. Forty-one percent of the general public with scores above the mean were opposed to encouraging economic growth by increasing government spending to provide jobs, but only 23 percent with scores below the mean were opposed to such an idea.

One proposition in the survey was included to assess the degree of support for competitive markets. The proposition posed the hypothetical situation of whether the U.S. government should prohibit increases in oil and gas prices if a crisis in the Middle East reduces the supply of oil, thus causing oil and gasoline prices to increase. Overall, only 32 percent of the general public were opposed to government intervention and price controls in the oil and gas market under the "crisis" circumstances. The percentage rose to 47 percent for those with above average knowledge of economics, but it was only 25 percent for those with average or below average scores.

Americans were also concerned about trade deficits. One question on the survey asked the general public whether the U.S. government should limit imports from other countries to correct the trade deficit. Only 29 percent of Americans opposed that idea; however, the proposition was opposed by 48 percent of the general public with knowledge scores above the mean, but by only 20 percent with scores below the mean.

For each issue, of course, there were differences of opinion among those with higher levels of economic knowledge. For example; on the issue of the trade deficit, 48 percent of people with scores greater than the mean opposed import restrictions as a way to correct the trade deficit, but 48 percent favored the idea (4 percent did not offer an opinion or did not know). The informed public was clearly split on this issue. The overall data, however, would leave the impression that the public favored import restriction because only 29 percent opposed them and 67 percent favored them (4 percent did not offer an opinion or did not know). Differences of opinion are likely to be smaller than what would be the case if only the overall percentages are reported for different propositions.

The differences in the percentage responses to these items and other opinion questions on the survey suggest that knowledge factors must be used in interpreting public opinion on economic issues. Most economic issues require a minimal amount of economic knowledge for people to understand, but too often survey results are presented only in the aggregate. Analysis of economic opinions on issues is perhaps best performed by sorting responses by a knowledge variable and by showing

knowledgeable opinions about the economic issue rather than simply presenting the overall response. This type of analysis is especially important on public issues that require background information or knowledge of the subject.

IV. Factors Affecting Economic Knowledge

The research literature in economic education at the college and precollege levels suggests factors that influence economic knowledge (Siegfried and Fels, 1979; Becker, Greene, and Rosen, 1990). The age, sex, or race of individual are known to affect economic understanding. Other things equal, older adults possess more economic knowledge than younger adults because they have had more years to learn about how the economy works. Studies at both the high school and college levels have also shown that a person's sex can influence economic understanding (e.g., Siegfried, 1979). Males tend to score significantly higher than females on tests of basic economic understanding. Some studies have found that race or ethnic origin affects the level of economic knowledge, with whites slightly outscoring blacks on economics tests in high school (see Becker, et al., 1990).

Education will influence what people know about economics. Other things equal, people with more education are more likely to understand what affects the national economy because they are more literate and capable of understanding complex economic events. Some college students also take economics courses. This coursework will usually have a significantly positive effect on economic knowledge when compared to college students who had no coursework in economics.

Income also affects economic understanding. Those with a higher level of income are more likely to show a direct interest in economic matters and are more likely to understand how the economy works than those with less income.

Finally, the political orientation or affiliation of a person may affect the economic knowledge, or at least a person's propensity to be aware of developments in the national economy. The direction of the potential effect, however, is difficult to specify with any degree of certainty. It would be plausible to argue that Republicans would be more knowledgeable about economics simply because the type of person that supports that party has historically been more business-oriented and directly concerned with economic issues such as taxes, free trade, and government regulation of the economy. Democrats, by contrast, have traditionally focused on social issues with less of a direct economic focus such as civil rights and urban problems.

Model. A regression model was specified based on the working hypotheses for the above general factors. The variables used for the estimation are described in Table 4 and were drawn from the Gallup data. The dependent variable score was created by summing the correct responses to the 19 knowledge questions on the survey. This economic knowledge test had an alpha reliability of .71, suggesting that this short 15-item test provides a reliable measure of basic economic knowledge. In fact, the alpha estimate is comparable to estimates for standardized economics tests at the high school and college levels (Soper and Walstad, 1987; Saunders, 1991).

The linear regression equation included two dummy variables to control for the effects of SEX and RACE, and a continuous variable to account for the effect of AGE.[2] The education factor was entered as a set of four dummy variables capturing different levels of education (POSTGRAD, COLLEGE4, COLLEGE2, and HIGHSCH), with the effect of less than a high school education captured in the constant term. The lasting effects of economic education was measured by a dummy variable for whether a person had taken an economics course in college (CECON). Income was represented by a set of four dummy variables (UPINCOME, UMINCOME, MIDINCOME, and NRINCOME), with the excluded category being low income ($25,000 or less). Party orientation was entered in a set of three dummy variables. Included in the regression equation were REPUBLICAN, INDEPENDENT, and NOPARTY. Democrat was the excluded category for the set of political affiliation variables.

Insert Table 4 about here

Findings. The results from the regression are reported in Table 5. The coefficient signs conformed to a priori expectations and were statistically significant in most cases. Ceteris paribus, being older, or being male, or being white, or being more educated, having taken a college course in economics, having a higher income level, or being classified as a Republican were factors that made a positive and statistically significant contribution to the prediction of the economic knowledge scores. The set of dummy variables for different levels of education was highly

significant (F=43.74; p=.000). The size of the coefficient for each education variable was positive and statistically greater than the omitted category of less than a high school education. The size of the coefficient also increased as the level of education increased, indicating the increasingly positive effects of more education on economic knowledge.

Economic education, as expected, had a highly significant effect on economic knowledge. Those adults who had taken an economics course while attending college showed greater economic knowledge than those students who had attended college but not taken an economics course. The results suggest that there is a lasting effect of economic education on the economic knowledge of adults even years after attending college.

The set of income dummy variables was significant overall (F=9.26; p=.000), but the significance varied by income level. Those individuals with upper incomes or upper-middle incomes showed significantly more knowledge about economics than those with low incomes. On the other hand, there was no statistically significant difference in economic knowledge between those individuals with only a middle income, or those who did not report their income, relative to the excluded category of low income.

The set of dummy variables representing different political orientations was a significant factor in explaining economic knowledge (F=2.59, p=.052). Other things equal, there was a small but significant difference in economic knowledge in favor of Republicans over Democrats. The coefficient for "independent" in political orientation

was positive relative to Democrat, but the effect was not statistically significant. There was no statistically significant difference in economic knowledge between those with a no party affiliation relative to those who reported a Democratic affiliation.

Insert Table 5 about here

V. Logit Analysis of Economic Opinions

Logit models were specified to investigate the effect of economic knowledge on opinions about economic issues after controlling for the influence of other variables. The dependent variable in each logit model was the log of the odds that a person would hold a particular view on an economic issue. The five issues that were studied were the ones previous examined in crosstabulations: (1) leaving the responsibility for monetary policy to the Federal Reserve System (FEDRES); (2) taxing business to reduce the Federal budget deficit (DEFICIT); (3) increasing government spending for jobs as a way to stimulate economic growth (GROWTH); (4) establishing government price controls on oil and gasoline price (OIL) during a crisis in the Middle East; and, (5) setting import restrictions as a means of reducing a trade deficit (IMPORTS). The means, standard deviations, and definitions of the dichotomous dependent variables are given in Table 6.

Insert Table 6 about here

The sign for the coefficient for economic knowledge in each logit equation was expected to be positive and statistically significant reflecting the strong contribution of

economic knowledge to the prediction of the dichotomous choice in each equation. The expected direction of this effect was based on economists' views on these types of issues and the way the dependent variable was specified. In the case of the Federal Reserve, for example, most economists would support the notion that the Fed should be responsible for monetary policy, not the Congress, the President, or some other organization (1=Federal Reserve; 0=other group). Most economists would also be inclined to give a no response to the four other propositions because the proposed actions would reduce economic efficiency or might have harmful secondary effects (e.g., Blinder, 1990; Alston, Kearl, and Vaughn, 1992). Thus, a person who possessed more economic knowledge (had a higher ESCORE) was expected to give a response to the propositions similar to most economists on these issues.

The other predictor variables in the logit equations were personal characteristics (age, sex, and race), socioeconomic factors (income and education), and political party orientation. These background factors were included because they were thought to be significant factors that shaped people's opinion, even after controlling for economic knowledge.[3] The inclusion of these variable in the logit analysis permitted estimation of the effect of economic knowledge holding constant these other influences. It was difficult, however, to specify the expected direction of the coefficient signs or to anticipate whether these background variables would be significant based on previous research (e.g., Blinder and Holtz-Eakin, 1984). The

sign and significance for variables was likely to vary from proposition to proposition, and thus t-statistics were evaluated using a two-tailed test of significance.

Findings. The results from the maximum-likelihood estimation of each of the five logit equations are given in Table 7. The chi-square statistic for each model was highly significant at beyond the .01 level. The number of correct predictions of the choices by the logit model was relatively high, ranging from 81 percent in the case of the FEDRES equation to a low of 61 percent in the case of DEFICIT equation.

Insert Table 7 about here

The results showed a statistically significant influence in the expected direction from ESCORE variable for predicting the log odds of the choice in each equation. None of the other variables showed a similar consistency in coefficient sign and in the significance of the effect. The coefficient for AGE was positive and significant in two equations (DEFICIT and GROWTH), but negative and insignificant in three equations (FEDRES, OIL, and IMPORTS). The coefficient for SEX showed that males tended to support the propositions, but the effect was only significant in the case of the DEFICIT and GROWTH estimations. The RACE coefficient was negative for whites in the FEDRES decision and positive in the four other equations, but insignificant in all equations. Similar inconsistencies in sign or statistical significance were found for variables representing education, income, and political orientation. Only economic knowledge provided a reliable predictor of public opinion on these issues.

Knowledge Effect. To appreciate how economic knowledge affected each opinion, the estimated probabilities of support for each proposition were calculated for three levels of knowledge -- at the mean (8 points), one standard deviation above the mean (11.5 points), and one standard deviation below the mean (4.5 points). These probabilities are reported in Table 8 holding constant other characteristics of an individual. Column (1) shows the probabilities of supporting a position for each choice variable based the three different levels of economic knowledge and on assumptions about the other characteristics -- that the person was of average age (45 years), was male, was white, had a four-year college education, earned a middle income, and was Republican. The other columns report the probabilities based on the same characteristics, but with a change in one or two variables: column (2) gives the probabilities for females; column (3) reports the probabilities for Democrats; and column (4) gives the probabilities for Democrats and nonwhites.

Insert Table 8 about here

Based on the probabilities for the basic set of characteristics in column (1), there was over a three-fold increase (from .12 to .41) in the probability of accepting the idea that the Federal Reserve should be responsible for monetary policy as the level of knowledge moved from one standard deviation below the mean to one standard deviation above the mean. The probability of opposing taxation of business to reduce the Federal deficit, or the probability of opposing an increase in government spending to provide jobs as a way to stimulate economic growth, increased by .12

and .13, respectively, as the economic knowledge score increased two standard deviations. The probability of opposition to government intervention and price controls for oil and gasoline increased by .24 when the knowledge score rose. Finally, there was a substantial increase of .28 in the probability that a person would not support import restrictions to reduce a trade deficit as the economic knowledge score changed from one standard above the mean than one standard deviation below the mean.

The change in probabilities in the other columns showed the same basic pattern even as changes were made in one or two variables in the specified set of characteristics. Despite the changes, the probability of supporting a proposition consistently increased as the knowledge level increased. This pattern occurred irrespective of whether the person was male or female, Republican or Democrat, or white or nonwhite. The effect of economic knowledge on the probabilities of holding the specified opinions on these economic issue would be similar if other possible combinations were used.[4]

VI. Conclusion

The results from the survey suggest that the economic knowledge base of the American public is sadly deficient for understanding or making decisions about most economic issues. This economic illiteracy has the potential to misshape public opinion on economic issues, and lead to policies that have negative or perverse effects on the economy and on our economic institutions. Economic knowledge has a direct effect on public opinion. People will state an opinion about an economic

issue despite having little or no knowledge of the subject. When survey reports give only overall responses to a question, the findings mask significant differences between informed and uniformed opinions, especially on economic issues. In fact, economic knowledge may be the most critical factor determining public opinion on economic issues -- perhaps more important and more consistently influential than other personal characteristics such as age, sex, race, the level education or income, or political party affiliation.

Endnotes

1. A copy of the survey questions, description of the survey methodology, and data on question responses are described in Walstad and Larsen (1992).

2. There were 12 missing observations for AGE so the sample used for the regression analysis was slightly reduced from 1,005 to 993 cases.

3. The dummy variable for taking a college economics course was omitted from the logit analysis because it was highly correlated with economic knowledge and the dummy variables for four-year college and post graduate levels of education.

4. Similar logit analysis was conducted with each equation using responses to a specific knowledge question about an issue in place of the aggregate knowledge score (e.g., see Table 2). In four of the 5 analyses, the knowledge question was a significant predictor of the lay of the odds of holding an opinion on the issue. The only insignificant knowledge effect on an opinion was found for the answer to the deficit knowledge question.

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Table 1: Percent of Correct Responses to Economic Knowledge Questions

Economics Item	%
1. Unemployment rate	22
2. Inflation rate	11
3. Inflation measure	35
4. Economic growth	40
5. Budget deficit	51
6. Deficit size	19
7. Federal Reserve	46
8. Monetary policy	33
9. Monetary policy ex.	21
10. Fiscal policy	50
11. Fiscal policy ex.	23
12. Economic policy	48
13. Productivity	68
14. Purchasing power	60
15. Profits	36
16. Profit rate	13
17. Supply & demand	64
18. Value of dollar	50
19. Quotas	49
Mean % correct	39%
(*N* = 1,005)	

Table 2: Opinions on What Institution Should Set Monetary Policy by Knowledge

	By Response to Knowledge Question	
	Correct	Incorrect
Federal Reserve	41.1%	15.8%
Other Institution	58.9%	84.2%
N	(207)	(798)
	By Knowledge on All Questions	
	> Mean	≤ Mean
Federal Reserve	38.3%	12.5%
Other Institution	61.7%	87.5%
N	(329)	(676)

Table 3: Opinions on Economic Issues by Economic Knowledge Scores
(Percent responding no to the proposition)

	Overall	By Knowledge Score	
		> Mean	≤ Mean
Reduce the Federal budget deficit by increasing taxes on business.	55.0%	68.8%	48.4%
Encourage economic growth by increasing government spending to provide jobs.	29.3%	41.2%	23.3%
U.S. government should prohibit an increase in oil and gas prices, if the supply of oil is reduced by a crisis in the Middle East.	31.8%	46.6%	24.6%
Limit imports from other countries to reduce a trade deficit.	29.3%	47.7%	20.3%
N	1,005	329	676

Table 4: Description of Variables for Knowledge Regression (N = 993)

Variables	Description	Mean	S.D.
ESCORE	Score on 19 economics questions (alpha reliability: .71)	7.937	3.507
AGE	Age in years	44.726	16.101
SEX	Respondent Sex (1=Male; 0=Female)	.502	.500
RACE	Race (1=White; 0=Nonwhite)	.877	.328
CECON	Took Economics Course in College (1=yes; 0=no)	.253	.435
	Education (1=yes; 0=no)		
POSTGRAD	Post Graduate Education	.122	.327
COLLEGE4	Four Years of College	.171	.377
COLLEGE2	Two Years of College	.249	.433
HIGHSCH	High School Education	.347	.476
LESSHS	Less Than High School Education	.111	.314
	Income (1=yes; 0=no)		
UPINCOME	Upper Income [+$75K]	.103	.304
UMINCOME	Upper Middle Income [$50-74.9K]	.164	.371
MDINCOME	Middle Income [$25-49.9K]	.359	.480
LINCOME	Lower Income [< $25K]	.322	.468
NRINCOME	Did Not Report Income	.052	.222
	Party Identification (1=yes; 0=no)		
REPUBLICAN	Republican	.332	.471
DEMOCRAT	Democrat	.359	.480
INDEPENDENT	Independent	.232	.422
NOPARTY	Did Not Give Party Identification	.077	.266

Table 5: OLS Regression Results for Economic Knowledge Score

variables	b-coefficient
AGE	.0164[a] (.0058)
SEX	1.5623[a] (.1846)
RACE	1.0428[a] (.2834)
CECON	1.5556[a] (.2580)
POSTGRAD	3.8385[a] (.4261)
COLLEGE4	2.7092[a] (.4009)
COLLEGE2	1.9101[a] (.3461)
HIGHSCH	1.3651[a] (.3154)
UPINCOME	1.9743[a] (.3529)
UMINCOME	.6508[b] (.2917)
MDINCOME	.1477 (.2284)
NRINCOME	.3719 (.4297)
REPUBLICAN	.5034[b] (.2207)
INDEPENDENT	.3191 (.2433)
NOPARTY	-.1515 (.3633)
CONSTANT	2.6195
Adj. R^2	.356
SEE	2.814
F	37.600
N	993

a = significant at .01 level; two-tailed test

b = significant at .05 level; two-tailed test

(Standard errors in parentheses)

Table 6: Description of Dependent Variables for Logit Analysis (N = 993)

Variables	Description	Mean	S.D.
FEDRES	Federal Reserve Should Set Monetary Policy (1=Yes; 0=No or other response)	.234	.423
DEFICIT	Reduce Federal budget deficit by increasing taxes on business (1=No; 0=Yes or other response)	.576	.494
GROWTH	Encourage economic growth by increasing government spending to provide jobs (1=No; 0=Yes or other response)	.321	.467
OIL	U.S. government should prohibit an increase in oil and gas prices, if the supply of oil is reduced by a crisis in Middle East. (1=No; 0=Yes or other response)	.348	.477
IMPORTS	Limit imports from other countries to reduce a trade deficit (1=No; 0=Yes or other response)	.315	.465

Table 7: Logit Analysis of Five Economic Issues (N = 993)

Variables	Dependent Variables (see Table 6)				
	FEDRES	DEFICIT	GROWTH	OIL	IMPORTS
AGE	-.0007	.0143[a]	.0174[a]	-.0092	-.0035
	(.0057)	(.0044)	(.0047)	(.0048)	(.0049)
SEX	.0479	.3030[b]	.4158[a]	.0877	.2831
	(.1771)	(.1416)	(.1526)	(.1517)	(.1566)
RACE	-.1350	.3750	.4131	.0866	.2172
	(.2768)	(.2085)	(.2583)	(.2344)	(.2504)
POSTGRAD	.3389	.2518	.3952	.9206[a]	.3238
	(.4185)	(.3220)	(.3493)	(.3540)	(.3513)
COLLEGE4	.1856	.2372	.4688	.3147	-.1320
	(.3998)	(.2912)	(.3201)	(.3311)	(.3278)
COLLEGE2	-.0181	.2915	.3707	.3722	-.1945
	(.3808)	(.2581)	(.2929)	(.3047)	(.3004)
HIGHSCH	.0917	.4468	.2157	.2385	-.2531
	(.3658)	(.2379)	(.2735)	(.2892)	(.2807)
UPINCOME	.6385[b]	-.3345	-.0449	.4962	.2189
	(.3145)	(.2708)	(.2811)	(.2748)	(.2832)
UMINCOME	.8022[a]	-.2417	.2873	.2332	-.0978
	(.2725)	(.2185)	(.2294)	(.2297)	(.2386)
MIDINCOME	.5708[b]	-.1967	.0441	.1890	-.0366
	(.2346)	(.1711)	(.1864)	(.1863)	(.1913)
NRINCOME	1.3690[a]	-.1755	.0942	.6544	-.5229
	(.3807)	(.3229)	(.3555)	(.3382)	(.4052)
REPUBLICAN	.0281	.6768[a]	.8808[a]	.3480	.2741
	(.2050)	(.1662)	(.1828)	(.1785)	(.1862)
INDEPENDENT	-.0360	.4001[b]	.7700[a]	.3584	.5542[a]
	(.2230)	(.1799)	(.1983)	(.1941)	(.1987)
NOPARTY	-.1883	.0317	1.0163[a]	.5702	.3847
	(.3711)	(.2659)	(.2890)	(.2913)	(.3104)
ESCORE	.2404[a]	.0881[a]	.0754[a]	.1508[a]	.1871[a]
	(.0294)	(.0240)	(.0248)	(.0253)	(.0265)
CONSTANT	-3.7816	-1.9519	-3.6972	-2.3842	-2.6420
Chi-square [df: 15]	165.11[a]	78.12[a]	100.50[a]	128.66[a]	143.16[a]
Correct Predictions	81.02%	60.82%	68.58%	70.80%	74.02%

[a] significant at .01 level (two-tailed test)

[b] significant at .05 level (two-tailed test)

(Standard errors in parentheses)

Table 8: Probabilities Calculated from Logit Analysis

Knowledge Score	FEDRES				DEFICIT				GROWTH				OIL				IMPORTS			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
a. $\bar{x}$ - 1s	.12	.10	.10	.11	.62	.53	.44	.35	.49	.37	.27	.20	.25	.27	.18	.17	.21	.15	.15	.13
b. $\bar{x}$	.23	.22	.23	.25	.69	.62	.53	.43	.55	.44	.33	.24	.36	.34	.29	.27	.33	.27	.27	.23
c. $\bar{x}$ + 1s	.41	.43	.44	.47	.75	.70	.61	.52	.61	.51	.40	.30	.49	.49	.43	.40	.49	.44	.45	.39
Diff. (c-a)	.29	.33	.34	.36	.13	.17	.17	.17	.12	.14	.13	.10	.24	.22	.25	.23	.28	.29	.30	.26

(1) Based on logit results for 44-year-old, white male, with 4 years of college education, middle income and Republican political orientation.

(2) Based on (1) but for females.

(3) Based on (1) but for Democrats.

(4) Based on (1) but for Democrats and nonwhites.